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| APPLICATION NO.                  | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO.     | CONFIRMATION NO. |
|----------------------------------|-------------|----------------------|-------------------------|------------------|
| 09/783,101                       | 02/15/2001  | Philip D. Mooney     | MOONEY 66-22            | 4481             |
| 7590 10/19/2004                  |             |                      | EXAMINER                |                  |
| MANELLI DENISON & SELTER PLLC    |             |                      | BANGACHON, WILLIAM L    |                  |
| 7th Floor<br>2000 M Street, N.W. |             |                      | ART UNIT                | PAPER NUMBER     |
| Washington, DC 20036-3307        |             |                      | 2635                    |                  |
|                                  |             |                      | DATE MAILED: 10/19/2004 |                  |

Please find below and/or attached an Office communication concerning this application or proceeding.

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|   | Application No.   | Applicant(s)   |  |  |  |  |
|---|---|--|--|--|--|--|
|   | 09/783,101  | MOONEY ET AL.  |  |  |  |  |
| Office Action Summary   | Examiner  | Art Unit   |  |  |  |  |
|   | William Bangachon   | 2635   |  |  |  |  |
| The MAILING DATE of this communication app<br>Period for Reply  | ears on the cover sheet with the c  | orrespondence address  |  |  |  |  |
| A SHORTENED STATUTORY PERIOD FOR REPLY THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply If NO period for reply is specified above, the maximum statutory period was pailing to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b). | 86(a). In no event, however, may a reply be time within the statutory minimum of thirty (30) days apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE                    | nely filed s will be considered timely. the mailing date of this communication. D (35 U.S.C. § 133). |  |  |  |  |
| Status  |   |  |  |  |  |  |
| 1) Responsive to communication(s) filed on 30 Ju  | ne 2004.  |  |  |  |  |  |
| 2a)⊠ This action is <b>FINAL</b> . 2b)□ This  | This action is <b>FINAL</b> . 2b) This action is non-final.   |  |  |  |  |  |
| 3) Since this application is in condition for allowan   | 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is  |  |  |  |  |  |
| closed in accordance with the practice under E  | x parte Quayle, 1935 C.D. 11, 45  | 53 O.G. 213.   |  |  |  |  |
| Disposition of Claims   |   |  |  |  |  |  |
| 4) Claim(s) <u>1-12,15,18,19 and 22</u> is/are pending in the application.  |   |  |  |  |  |  |
| -   | 4a) Of the above claim(s) is/are withdrawn from consideration.  |  |  |  |  |  |
| 5) Claim(s) is/are allowed.   |   |  |  |  |  |  |
| 6)⊠ Claim(s) <u>1-12,15,18,19 and 22</u> is/are rejected.   | s)⊠ Claim(s) <u>1-12,15,18,19 and 22</u> is/are rejected.   |  |  |  |  |  |
| 7) Claim(s) is/are objected to.   | 7) Claim(s) is/are objected to.   |  |  |  |  |  |
| 8) Claim(s) are subject to restriction and/or   | election requirement.   |  |  |  |  |  |
| Application Papers  |   | •  |  |  |  |  |
| 9) The specification is objected to by the Examiner   | •   |  |  |  |  |  |
| 10)☐ The drawing(s) filed on is/are: a)☐ accepted or b)☐ objected to by the Examiner.   |   |  |  |  |  |  |
| Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).   |   |  |  |  |  |  |
| Replacement drawing sheet(s) including the correcti   | - · · ·   |  |  |  |  |  |
| 11)☐ The oath or declaration is objected to by the Ex   | aminer. Note the attached Office  | Action or form PTO-152.  |  |  |  |  |
| Priority under 35 U.S.C. § 119  |   |  |  |  |  |  |
| 12) Acknowledgment is made of a claim for foreign   | priority under 35 U.S.C. § 119(a)   | -(d) or (f).   |  |  |  |  |
| • • •   | a) All b) Some * c) None of:  |  |  |  |  |  |
|   | <ol> <li>Certified copies of the priority documents have been received.</li> <li>Certified copies of the priority documents have been received in Application No</li> </ol>                             |  |  |  |  |  |
|   | 3. Copies of the certified copies of the priority documents have been received in Application No  3. Copies of the certified copies of the priority documents have been received in this National Stage |  |  |  |  |  |
|   | application from the International Bureau (PCT Rule 17.2(a)).   |  |  |  |  |  |
| * See the attached detailed Office action for a list of the certified copies not received.  |   |  |  |  |  |  |
|   | ٠   |  |  |  |  |  |
|   |   |  |  |  |  |  |
| Attachment(s)   |   |  |  |  |  |  |
| 1) Notice of References Cited (PTO-892)   | 4) Interview Summary  |  |  |  |  |  |
| 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date  | Paper No(s)/Mail Da 5) Notice of Informal P 6) Other:   | atent Application (PTO-152)  |  |  |  |  |
| Detection 17 described  |   |  |  |  |  |  |

#### **DETAILED ACTION**

# **Drawings**

1. Objection to the drawings under 37 CFR 1.83(a) is withdrawn.

# Response to Arguments

2. Applicant's arguments with respect to claims 1-12, 15, 18-19, and 22, have been considered but are most in view of the new ground(s) of rejection.

# Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

# Claim Rejections - 35 USC § 103

- 4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. The factual inquiries set forth in *Graham* v. *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

- 1. Determining the scope and contents of the prior art.
- 2. Ascertaining the differences between the prior art and the claims at issue.
- 3. Resolving the level of ordinary skill in the pertinent art.
- 4. Considering objective evidence present in the application indicating obviousness or nonobviousness.
- 6. Claims 1-7, 9-10, 15, 18, 19, and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable by USP 5,838,074 (Loeffler et al) in view of USP 6,291,968 (Nantz et al).

In claims 1, 18 and 22, Loeffler et al teach of a key chain rechargeable device (2), comprising:

key securing structure {col. 3, lines 7-12};

an electronic device associated with said key securing structure {figure 1b}; and a rechargeable battery source to power said electronic device {col. 2, lines 13-14, lines 55-57; col. 7, lines 9-10};

wherein said key chain rechargeable device is adapted to be inductively recharged from an external power source when a key associated with said key securing structure is inserted in a lock device {col. 3, lines 7-15, lines 48-57; col. 5, lines 24-36}.

Although Loeffler does not disclose expressly "wherein said key chain rechargeable device is distinct from a key inserted in said key securing structure and adaptively attaches to a key chain", this feature is just a matter of design choice

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and would have been obvious in the system of Loeffler, to one of ordinary skill in the art. In this case, Nantz is relied upon to teach the claimed conventional key chain rechargeable device (22) distinct from a key (32), as shown in figure 1 {Nantz, col. 3, lines 16-25}. This avoids having a bulky key with a rechargeable battery imbedded in it.

In claim 2, the key chain rechargeable device according to claim 1, wherein: said key securing structure is a dummy key hole {Loeffler col. 3, lines 7-15}.

In claim 3, the key chain rechargeable device according to claim 1, further comprising: a charging circuit (1) in said electronic device, said charging circuit (1) adapted for electrical contact with a key secured by said key securing structure {Loeffler, figure 1a}.

In claim 4, the key chain rechargeable device according to claim 3, wherein: said charging circuit is permanently associated with said key chain rechargeable device {Loeffler, col. 3, lines 7-15}.

In claim 5, the key chain rechargeable device according to claim 3, wherein: said charging circuit (1) is permanently associated with said lock {Loeffler, col. 3, lines 7-9}.

In claim 6, the key chain rechargeable device according to claim 1, wherein: said external power source is a vehicle's electrical system {Loeffler, col. 1, lines 46-57}.

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In claim 7, the key chain rechargeable device according to claim 1, wherein: said key chain rechargeable device is a wireless RF device {Loeffler, abstract}.

In claim 9, the key chain rechargeable device according to claim 1, wherein: said key chain rechargeable device is a security alarm enable/disable device {Loeffler, col. 1, lines 28-55}.

In claim 10, the key chain rechargeable device according to claim 1, wherein: said key chain rechargeable device is a keyless entry remote {Loeffler, col. 1, lines 6-17}.

In claim 15, the key chain rechargeable device according to claim 1, wherein: said key chain rechargeable device is recharged from said external power source only when said key associated with said securing structure is inserted in said lock device {Loeffler, col. 3, lines 7-15, lines 48-50}.

Claim 18 recites the limitations of claims 1, 6, 9-10, and 15, and therefore rejected for the same reasons.

Claim 19 recites a method of practicing the device of claims 1 and 15, and therefore rejected for the same reasons.

7. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over USP 5,838,074 (Loeffler et al) in view of USP 6,291,968 (Nantz et al), and further in view of USP 6,323,775 (Hansson).

In claim 8, Loeffler et al does not disclose "said key chain rechargeable device is a BLUETOOTH network device". Hansson, in the same problem solving area (battery chargers), teach of notifying Bluetooth device users to charge the device when it is close to a charging unit for the device {col. 2, lines 1-18; col. 10, lines 60-65}. Hansson suggests that this is desirable to avoid getting a low battery notification when the user is located away from the charging unit, such as while the user is traveling, and avoid depleting the battery in the device. {col. 2, lines 1-4}. Obviously, this feature is desirable in the system of Loeffler et al because the rechargeable devices of Loeffler et al would always be charged and ensure proper use of the devices. Therefore, at the time of the invention, it would have been obvious to one of ordinary skill in the art to notify Bluetooth device users to charge the device when it is close to a charging unit for the device, to avoid depleting the battery in the device while the user is away from the charging unit.

8. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over USP 5,838,074 (Loeffler et al) in view of USP 6,291,968 (Nantz et al), and further in view of USP 3,855,534 (Holcomb et al).

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In claim 11, Loeffler et al does not disclose "said key chain rechargeable device is a penlight device". Holcomb et al, in the same problem solving area (extending battery life of a portable radio transmitter) teach of a special clip to include rechargeable batteries such as penlight cells {Holcomb et al, col. 1, lines 3-11}. Holcomb et al suggests that such a clip is desirable in that it can utilize different types of batteries {col. 1, lines 21-29}. Obviously, this feature is desirable in the system of Loeffler et al because it can utilize different types of batteries. Therefore, at the time of the invention, it would have been obvious to one of ordinary skill in the art to use a special clip to include rechargeable batteries such as penlight cells in the system of Loeffler et al, as taught by Holcomb et al, because this allows the system of Loeffler et al to utilized different types of battery cells.

9. Claims 1-7, 9-10, 12, 15, 18-19, and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over USP 5,561,331 (Suyama et al) in view of USP 6,184,651 (Fernandez et al).

In claims 1 and 22, Suyama et al teach of a key chain rechargeable device (figures 1-13), comprising:

key securing structure {col. 2, lines 45-51; col. 4, lines 57-63; col. 9, lines 30-37; col. 10, lines 47-62};

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an electronic device (2, 4, 12, 13, 23, 53, 56, 56a) associated with said key securing structure {paragraph bridging cols. 1 and 2; paragraph bridging cols. 4 and 5}; and

a rechargeable battery source (3) to power said electronic device (2, 4, 12, 13, 23, 53, 56, 56a) {col. 1, lines 43-51};

wherein said key chain rechargeable device (1, 11, 21, 51, 151, 251) is recharged from an external power source when a key (9, 63) associated with said key securing structure is inserted in a lock device {col. 1, line 26-col. 2, line 15; paragraph bridging cols. 7 and 8; col. 8, lines 20-25; col. 10, lines 15-21}.

wherein said key chain rechargeable device is distinct from a key inserted in said key securing structure and adaptively attaches to a key chain {figures 12 and 13}.

Suyama et al does not disclose expressly "inductive charging of a rechargeable device/battery". Fernandez et al teach that contact less inductive charging of portable devices, including pagers, is desirable because it is a convenient way to recharge a portable device without having to work with a wired connection. It does not require a user to connect plugs, does not require a user to locate a charging unit where it is plugged, and provides the user the ability to quickly grab-n-go a unit that has been charged {Fernandez et al, col. 1, lines 13-33}. The systems of Suyama and Fernandez are analogous art because they are from same problem solving area, charging of portable devices. Obviously, inductively charging the rechargeable battery of Suyama et al, as taught by Fernandez is desirable.

At the time of the invention, it would have been obvious to one of ordinary skill in the art to inductively charge the rechargeable battery of Suyama et al, as claimed, because this provides a user the ability to recharge the rechargeable battery without having to work with a wired connection. The suggestion/motivation for doing so would have been: a) it does not require a user to connect plugs; b) does not require a user to locate a charging unit where it is plugged; c) provides the user the ability to quickly grab-n-go a key securing structure that has been charged. Therefore, it would have been obvious to combine Suyama with Fernandez to obtain the invention as specified in claims 1 and 22.

In claim 2, the key chain rechargeable device according to claim 1, wherein: said key securing structure is a dummy key hole as shown in figures 1, 2, 6-7, 8B and 10 {Suyama et al}.

In claim 3, the key chain rechargeable device according to claim 1, further comprising: a charging circuit (2, 92) in said electronic device, said charging circuit (2, 92) adapted for electrical contact with a key secured by said key securing structure {Suyama et al, col. 1, lines 43-52}.

In claim 4, the key chain rechargeable device according to claim 3, wherein: said charging circuit (2) is permanently associated with said key chain rechargeable device as shown in figures 1, 11-13 {Suyama et al}.

In claim 5, the key chain rechargeable device according to claim 3, wherein: said charging circuit (92) is permanently associated with said lock (93) {Suyama et al, col. 6, lines 21-30}.

In claim 6, the key chain rechargeable device according to claim 1, wherein: said external power source is a vehicle's electrical system {Suyama et al, col. 1, lines 43-52}.

In claim 7, the key chain rechargeable device according to claim 1, wherein: said key chain rechargeable device is a wireless RF device {Suyama et al, col. 5, lines 32-37; col. 7, lines 12-25}.

In claim 9, the key chain rechargeable device according to claim 1, wherein: said key chain rechargeable device is a security alarm enable/disable device {Suyama et al, paragraph bridging cols. 6 and 7; col. 7, lines 34-42}.

In claim 10, the key chain rechargeable device according to claim 1, wherein: said key chain rechargeable device is a keyless entry remote {Suyama et al, col. 4, lines 50-56; col. 8, line 64-col. 9, line 14}.

In claim 12, Suyama et al does not disclose "said key chain rechargeable device is a pager". Fernandez et al teach that contact less inductive charging of

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portable devices, including pagers, is desirable because it is a convenient way to recharge a portable device without having to work with a wired connection. It does not require a user to connect plugs, does not require a user to locate a charging unit where it is plugged, and provides the user the ability to quickly grab-n-go a unit that has been charged (col. 1, lines 13-33). Obviously, charging a pager inductively is desirable in the system of Suyama et al because this provides a user to charge the pager without having to pull a plug and provides the user the ability to quickly use a pager that has been charged. Therefore, at the time of the invention, it would have been obvious to one of ordinary skill in the art to charge a pager inductively in the system of Suyama et al because this provides a user to charge the pager without having to pull a plug and provides the user the ability to quickly use a pager that has been charged, as taught by Fernandez et al.

In claim 15, the key chain rechargeable device according to claim 1, wherein: said key chain rechargeable device is recharged from said external power source only when said key associated with said securing structure is inserted in said lock device {Suyama et al, col. 2, lines 52-62; paragraph bridging cols. 4 and 5}.

Claim 18 recites the limitations of claim 1 and therefore rejected for the same reasons, further comprising a "vehicle ignition assembly" (Suyama, col. 7, lines line 52col. 8, line 4}.

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Claim 19 recites a method of practicing the device of claim 1 and therefore rejected for the same reasons.

10. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over US 5,561,331 (Suyama et al) in view of USP 6,184,651 (Fernandez et al) and further in view of USP 6,323,775 (Hansson).

In claim 8, Suyama et al does not disclose "said key chain rechargeable device is a BLUETOOTH network device". Hansson, in the same problem solving area (battery chargers), teach of notifying Bluetooth device users to charge the device when it is close to a charging unit for the device {col. 2, lines 1-18; col. 10, lines 60-65}. Hansson suggests that this is desirable to avoid getting a low battery notification when the user is located away from the charging unit, such as while the user is traveling, and avoid depleting the battery in the device. {col. 2, lines 1-4}. Obviously, this feature is desirable in the system of Suyama et al because the rechargeable devices of Suyama et al would always be charged and ensure proper use of the devices. Therefore, at the time of the invention, it would have been obvious to one of ordinary skill in the art to notify Bluetooth device users to charge the device when it is close to a charging unit for the device, to avoid depleting the battery in the device while the user is away from the charging unit.

11. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over USP 5,561,331 (Suyama et al) in view of USP 6,184,651 (Fernandez et al), and further in view of USP 3,855,534 (Holcomb et al).

In claim 11, Suyama et al does not disclose "said key chain rechargeable device is a penlight device". Holcomb et al, in the same problem solving area (extending battery life of a portable radio transmitter) teach of a special clip to include rechargeable batteries such as penlight cells {Holcomb et al, col. 1, lines 3-11}. Holcomb et al suggests that such a clip is desirable in that it can utilize different types of batteries {col. 1, lines 21-29}. Obviously, this feature is desirable in the system of Suyama et al because it can utilize different types of batteries. Therefore, at the time of the invention, it would have been obvious to one of ordinary skill in the art to use a special clip to include rechargeable batteries such as penlight cells in the system of Suyama et al, as taught by Holcomb et al, because this allows the system of Suyama et al to utilized different types of battery cells.

#### Conclusion

12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

USP 4,733,638 is cited in that it teaches of a "key chain rechargeable device is distinct from a key inserted in said key securing structure and adaptively attaches to a key chain" as shown in figure 3.

13. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

# Examiner Contact Information

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to William Bangachon whose telephone number is 571-272-3065. The examiner can normally be reached on 4/4/10.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Horabik can be reached on 571-272-3068. The fax phone numbers for the organization where this application or proceeding is assigned is 703-872-9314

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for regular and After Final formal communications. The examiner's fax number is 571-

273-3065 for informal communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-4700.

> William L Bangachon Examiner Art Unit 2635

October 18, 2004

MICHAEL HORABIK SUPERVISORY PATENT EXAMINER